**Installation of a 75Kw grid-tied with battery backup Solar Photo Voltaic System at the DOWASCO Sewage Treatment Plant**

**Dominica**

**THE PROJECT CONTRIBUTION TO**

Installation of solar panels connected to a backup battery, to power the water purification plant, (Dowasco Sewage Treatment Plant), also in case of energy supply cut off due to bad climatic conditions.

BACKGROUND

The Dominica Water and Sewerage Company Limited, [**(**DOWASCO](http://www.dowasco.dm/)**),** is a wholly publicly owned company that supplies drinking water to 90% of Dominica's population, and manages the sewerage network in and around the capital Roseau. Tropical Storm Erika in 2015 generated a lack of electricity in the city of Roseau, and surrounding areas, preventing the functioning of the DOWASCO water purification system and putting the safety of the population and the environment at risk. This is not an isolated case: due to its geographical position, Dominica is, in fact, continuously exposed to hurricanes and tropical storms. On average, the island is estimated to experience a hazardous climate event once every four years. These phenomena put the country's infrastructure to the test, creating significant problems in various economic sectors. The strengthening of this infrastructure through a photovoltaic system and an emergency battery will guarantee its supply from renewable sources and its functioning even in problematic circumstances, ensuring the necessary supply of water to the population.

 [**NDC Dominica**:](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Dominica%20First/Commonwealth%20of%20Dominica-%20Intended%20Nationally%20Determined%20Contributions%20(INDC).pdf) reduction of greenhouse gas emissions by 45% by 2030 according to the *Business as Usual* (BAU) scenario.

 [**2030 Agenda**:](http://www.un.org/sustainabledevelopment/sustainable-development-goals/)  Goal 6 - Clean water and sanitation; Goal 7 - Sustainable energy; Goal 13 - Climate action.

OBJECTIVE

Resilience of Dominica's water treatment system.

PLANNED ACTIVITIES

* Tender for the design, construction and installation of the photovoltaic system with battery backup and construction of the plant.
* Evaluation of the social and environmental impact of the project.
* Training of technicians for the use and maintenance of the system.

**SUBJECTS DURATION TOTAL COST OF THE INITIATIVE**

Promoters:

* Italian Ministry of the Environment, Land and Sea
* Permanent Representation of Dominica to the United Nations
* Actuators:
* DOWASCO – Dominica Water & Sewerage Company
* Caribbean Community Climate Change Centre, (CCCCC)

**July 2017 – July 2021**

$ 491,050

**Lender**: MATTM

**Other lenders**: ---

OUTPUT



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* 75 kw photovoltaic system, including an emergency battery, to power the installed DOWASCO water purification system.
* DOWASCO staff trained in renewable energy and in particular in the use of photovoltaic systems.



**PROJECT STATUS**

* **realized**  **in progress**

